

**THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE
PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:-/WHAT
I/WE CLAIM AS MY/OUR INVENTION:-**

1. A threaded deformed reinforcing bar for use in reinforced concrete, said bar comprising:
 - a core;
 - at least two series of transverse ribs on said core, the ribs in each said series aligned and spaced longitudinally along said bar and separated by troughs, each said series separated transversely from adjacent series by a longitudinally extending gap, and wherein said ribs are angled and aligned to form a pattern of threads along said bar; and
 - a longitudinally extending rib in each said longitudinally extending gap, each said longitudinally extending rib interrupted adjacent at least one end of said bar, whereby an internally threaded member may be selectively threaded onto said pattern of threads at said at least one end.
2. The bar of claim 1 wherein said core has a substantially circular cross-section.
3. The bar of claim 1 wherein said transverse ribs and said longitudinal ribs are integral with each other at areas of intersection of said ribs.
4. The bar of claim 3 wherein all said ribs are integral with said core.
5. The bar of claim 1 wherein said longitudinally extending ribs adjacent said at least one end of said bar are interrupted by the absence of said ribs in said troughs.
6. The bar of claim 1 wherein each said longitudinally extending rib terminates at a point spaced from said at least one end of said bar.
7. The bar of claim 1 wherein said longitudinal ribs are sheared off adjacent said one end of said bar.

8. The bar of claim 7 wherein parts of said transverse ribs are also sheared off adjacent said sheared off longitudinal ribs.
9. A threaded deformed reinforcing bar for use in reinforced concrete, said bar comprising:
 - a core;
 - at least one transversely extending rib forming a pattern of threads on said bar; and
 - at least one longitudinally extending rib intersecting said at least one transverse rib at multiple areas along said bar and interrupting said pattern of threads along said bar; and wherein at least a part of said at least one longitudinally extending rib is absent from a section of said bar adjacent at least one end of said bar whereby said pattern of threads in said section is unobstructed.
10. The bar of claim 9 wherein said core has a substantially circular cross-section.
11. The bar of claim 9 wherein said transverse rib is a continuous spiral along said bar.
12. The bar of claim 10 wherein said at least one transverse rib includes at least two series of discontinuities extending longitudinally along said bar and wherein one said longitudinally extending rib extends along each said series of discontinuities.
13. The bar of claim 12 wherein said transverse and said longitudinally extending ribs are integral with each other and with said core.
14. A process for the production of a threaded deformed reinforcing bar, said process comprising:
 - hot rolling a billet to form a rolled steel bar;
 - passing the rolled steel bar through a pair of opposed rolls to shape the rolled steel bar;

passing the shaped steel bar through a second pair of opposed rolls so as to form at least two series of transverse ribs and upon the shaped steel bar, said ribs separated by troughs, whereby said at least one longitudinally extending rib abuts against said at least two series of transverse ribs; and

eliminating portions of said longitudinal ribs from said troughs adjacent at least one end of said bar so as to form a continuous spiral rib upon at least a portion of the length of said shaped steel bar adjacent said at least one end.

15. The process of claim 14 wherein said step of eliminating portions of said at least one longitudinally extending rib comprises shearing off said portions by applying saw tooth rotary dies to said shaped steel bar.

16. The process of claim 14 wherein said step of eliminating portions of said at least one longitudinally extending rib comprises compressing said portions into said troughs by applying a smooth groove rotary die to said shaped steel bar.

17. A process for forming a continuous spiral thread upon a shaped steel bar having at least two series of transverse ribs and at least one longitudinally extending rib abutting against said at least two series of transverse ribs, said process comprising eliminating portions of said longitudinal ribs adjacent at least one end of said bar.

18. The process of claim 17 wherein said step of eliminating portions of said at least one longitudinally extending rib comprises shearing off said portions by applying saw tooth rotary dies to said shaped steel bar.

19. The process of claim 17 wherein said step of eliminating portions of said longitudinal ribs comprises compressing said portions into said troughs by applying a smooth groove rotary die to said shaped steel bar.

20. A process for the production of a threaded deformed reinforcing bar, said process comprising:

hot rolling a billet to form a rolled steel bar;

passing the rolled steel bar through a pair of opposed rolls to shape the rolled steel bar ;

passing the shaped steel bar through a second pair of opposed rolls so as to form at least two series of transverse ribs and upon the shaped steel bar, said ribs separated by troughs, whereby said at least one longitudinally extending rib abuts against said at least two series of transverse ribs; and

eliminating portions of said longitudinal ribs adjacent at least one end of said bar.

21. The process of claim 20 wherein said step of eliminating portions of said longitudinal ribs comprises shearing said longitudinal ribs from said shaped steel bar.